

REMARKS

This application has been carefully reviewed in light of the Office Action dated July 30, 2008. Claims 23 to 28 and 86 to 91 are pending in the application, of which Claims 23 to 28 are independent. Reconsideration and further examination are respectfully requested.

Claims 23 to 28 and 86 to 91 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,401,150 (Reilly) over U.S. Patent No. 6,503,147 (Stockdale) and in further view of U.S. Patent No. 7,324,224 (Shima). Reconsideration and withdrawal of these rejections are respectfully requested.

The present invention concerns a gaming machine printer that manages communications between the gaming machine printer and a game controller and between the gaming machine printer and an external device that may be connected and disconnected from the gaming machine printer.

In another aspect of the invention, the gaming machine printer monitors a plurality of communication ports and sets up a communication port as a special native port when the gaming machine printer determines that a game controller is coupled to that port.

In another aspect of the invention, the gaming machine printer notifies the game controller both before and after the gaming machine printer communicates with the external device. In another aspect of the invention, the gaming machine printer monitors itself and stores status information in a non-volatile memory. If communications with the game controller are lost and then restored, the gaming machine printer transmits a status report to the game controller based on the stored status information.

Claims 23 and 24

Turning now to the claims, Claim 23 is directed to a gaming machine printer. The gaming machine printer comprises a processor, a first communication port coupled to the processor, a second communication port coupled to the processor, the second communication port a native communication port connecting a game controller as a trusted host to the gaming machine printer and a memory coupled to the processor, the memory having programming instructions executable by the processor stored therein. The program instructions comprise detecting by the gaming machine printer when an external device is coupled to the first communication port, notifying by the gaming machine printer the game controller coupled to the second communication port when the gaming machine printer detects that the external device is coupled to the first communication port, disconnecting by the gaming machine printer communications from the game controller when the gaming machine printer detects that the external device is coupled to the first communication port, establishing by the gaming machine printer a trusted communication session with the external device and reporting by the gaming machine printer the communication session to the game controller when the communication session is completed and communications are restored by the gaming machine printer to the game controller.

Independent Claim 24 is directed to a method substantially in accordance with the gaming machine printer of Claim 23.

The applied art is not seen to disclose or suggest the features of Claims 23 and 24, and in particular is not seen to disclose or suggest at least the feature of detecting by the gaming machine printer when an external device is coupled to the first communication port, notifying by the gaming machine printer the game controller coupled to the second

communication port when the gaming machine printer detects that the external device is coupled to the first communication port and disconnecting by the gaming machine printer communications from the game controller when the gaming machine printer detects that the external device is coupled to the first communication port.

As understood by Applicants, Reilly discloses a centralized queue for network printing, in which clients of a network printer can make job requests and enter a spot in a job queue without transmitting actual print job data to the network. (See Reilly, Abstract.)

Reilly discloses that “CSCP facilitates reconnection to previously connected hosts. IDP uses the reconnection mechanism to implement remote queuing features, to subsequently request job data and to send asynchronous status updates to clients which support IDP.” (See, Reilly, column 6, lines 45 to 49, emphasis added). As clearly stated in Reilly, the “asynchronous status updates to clients which support IDP” which the Office Action relies are only sent after a host reconnects to the network printer of Reilly. No mention is made in Reilly of notifying by the gaming machine printer the game controller coupled to the second communication port when the gaming machine printer detects that the external device is coupled to the first communication port. In fact, the mechanism of Reilly relied upon by the Office Action is a mechanism that is only invoked after a host has already disconnected with the network printer and cannot possibly be used to notify a game controller by a gaming machine printer that has determined that an external device is connected to another communication port. In the present invention, the notification is sent by the gaming machine printer when the gaming machine printer detects that the external device is coupled to the first communication port. No such a process with such a precondition is even remotely suggested by Reilly.

In addition, the Office Action cites Reilly as disclosing a “close call” in a socket package used to close a connection to a host. (See Reilly, column 5, lines 26 to 49). While a “close call” may be used to close a socket connection, Reilly fails to disclose or suggest detecting by the gaming machine printer when an external device is coupled to the first communication port, notifying by the gaming machine printer the game controller coupled to the second communication port when the gaming machine printer detects that the external device is coupled to the first communication port and disconnecting by the gaming machine printer communications from the game controller when the gaming machine printer detects that the external device is coupled to the first communication port. As clearly stated in the Office Action, the disconnect services discussed in Reilly are all initiated by the host. That is, it is the host that instructs the printer to disconnect from the host. However, in the present claims, it is the gaming machine printer that detects the coupling of the external host and then it is the gaming machine printer that makes the determination to disconnect from the game controller without the gaming machine printer being instructed by either the game controller or the external device to do so.

Finally, Reilly discloses at column 6, lines 25 to 55 a Client Server Connection Protocol (CSCP) layer in a network printer. This layer includes a service provided by a network printer for a host to reconnect with the network printer. Once reconnecting is completed by the host, the remote printer provides services for remote queuing, requesting job data and sending asynchronous status updates. Firstly, Applicant submits that nothing in the services provided by the network printer remotely resemble reporting the communication session to the game controller when a communication session is completed as featured in the claims. As understood by Applicants, “remote queuing” is a service that allows a host to

submit a print job for queuing at the network printer, “requesting job data” is a service by which the network printer requests print data from the host and “asynchronous status updates” is understood to be a status update of the printer queue. None of these services is related to notifying a game controller that a gaming machine printer has completed a communication session with an external device. Secondly, it is the gaming machine printer, and not the game controller, that initiates the restoration of communications with the game controller when the communication session with the external device is completed. In Reilly, it is the host that initiates reconnecting with the network printer using the services supplied by the CSCP library and there is no suggestion that the network printer can initiate reconnecting. (See Reilly, column 6, lines 31 to 40.)

Applicant has reviewed both Stockdale and Shima and submits that nothing in either reference is seen to remedy the deficiencies of Reilly. As such, Applicant submits that independent Claims 23 and 24 are in condition for allowance, and such action is respectfully requested.

Claims 26 and 27

Claims 26 and 27 generally concern operation of a gaming machine printer having a plurality of communication ports. According to aspects of Claims 26 and 27, for each of a plurality of communication ports, it is determined if a game controller is coupled to the communication port, and the communication port is established as a native communication port to a trusted host when the game controller is detected on the communication port.

Referring specifically to claim language, independent Claim 26 is directed to a method of operating a gaming machine printer having a plurality of communication ports. The method comprises for each of the plurality of communication ports, determining by the gaming machine printer if a game controller is coupled to the communication port and establishing by the gaming machine printer the communication port as a native communication port that is disconnected from the game controller prior to performing a separate function establishing by the gaming machine printer the communication port as a native communication port that is disconnected from the game controller by the gaming machine printer prior to performing a separate function of downloading and uploading of information to and from the gaming machine printer for servicing of the gaming machine printer, the native port for connection to the game controller as a trusted host when the game controller is detected on the communication port, the native port for connection to the game controller as a trusted host when the game controller is detected on the communication port.

Independent Claim 27 is directed to a gaming machine printer substantially in accordance with the method of Claim 26.

The applied art is not seen to disclose or suggest the features of Claims 26 and 27, and in particular is not seen to disclose or suggest at least the feature of, establishing by the gaming machine printer the communication port as a native communication port that is disconnected from the game controller by the gaming machine printer prior to performing a separate function of downloading and uploading of information to and from the gaming machine printer for servicing of the gaming machine printer, the native port for connection to the game controller as a trusted host when the game controller is detected on the communication port.

In particular, Reilly is not seen to disclose establishing by the gaming machine printer the communication port as a native communication port that is disconnected from the game controller by the gaming machine printer prior to performing a separate function of downloading and uploading of information to and from the gaming machine printer for servicing of the gaming machine printer. In Reilly, no distinction is made between the different connections or hosts that are made to the printer. In the present claims, the gaming machine printer is connected to the game controller where the game controller is treated as a trusted host. When the gaming machine printer disconnects from the trusted host, it does so in order to perform a separate function related to servicing the printer. No such function is disclosed or suggested by Reilly.

In addition, Stockdale is not seen to remedy the deficiencies of Reilly. Specifically, in Stockdale, there is only one possible connection for the peripheral controller 234 to connect to the master gaming controller 200, namely via hub 230. Therefore, the peripheral controller 234 does not have a mechanism for determining if a game controller is coupled to game controller by a communication port from among a plurality of communication ports.

Therefore, independent Claims 26 and 27 are believed to be in condition for allowance, and such action is respectfully requested.

Claims 25 and 28

The invention of Claims 25 and 28 generally concerns a gaming machine printer, including a communication port coupling the gaming machine printer to a game controller. The status of the gaming machine printer is stored in a nonvolatile memory.

According to aspects of Claims 25 and 28, the status of a communication link to a game controller via the communication port is determined by the gaming machine printer, the status of the gaming machine printer is locked in the nonvolatile memory by the gaming machine printer when the gaming machine printer determines that the communications link is interrupted, and the status of the gaming machine printer is transmitted by the gaming machine printer to the game controller when the communication link is reestablished by the gaming machine printer.

Referring specifically to claim language, independent Claim 25 is directed to a gaming machine printer. The gaming machine printer includes a processor, a communication port coupling the gaming machine printer to a game controller, a nonvolatile memory store coupled to the processor, and a memory coupled to the processor, the memory having program instructions executable by the processor stored therein. The program instructions include storing a status of the gaming machine printer in the nonvolatile memory, determining the status of a communication link to the game controller via the communication port, locking the status of the gaming machine printer in the nonvolatile memory when the gaming machine printer determines that the communication link is interrupted, and transmitting the status of the gaming machine printer to the game controller when the communication link is reestablished.

Independent Claim 28 is directed to a method substantially in accordance with the gaming machine printer of Claim 25.

The applied art is not seen to disclose or suggest the features of Claims 25 and 28, and in particular is not seen to disclose or suggest at least the features of determining by the gaming machine printer the status of a communication link to a game controller via the

communication port, locking by the gaming machine printer the status of the gaming machine printer in the nonvolatile memory when the gaming machine printer determines that the communications link is interrupted, and transmitting by the gaming machine printer the status of the gaming machine printer to the game controller when the communication link is reestablished by the gaming machine printer.

In particular, Reilly is not seen to disclose or suggest transmitting the status of the gaming machine printer to the game controller when the communication link is reestablished by the gaming machine printer. In the cited portions of Reilly, it is disclosed that a network printer can perform a “call back” to a host in order to request data for a print job. However, this feature is only provided after reconnecting by a host. (See Reilly, column 6, lines 45 to 55). This reconnection facility is provided by the CSCP library which has been previously described. According to Reilly, the CSCP library allows a network printer acting as a server to open a passive port that advertises a service. The port only becomes active when a host requests access to the port by a matching service request. (See Reilly, column 6, lines 31 to 40.) Therefore, there is no disclosure or suggestion in Reilly of initiating by a gaming machine printer a transmission of a status to a game controller when the gaming machine printer reestablishes a connection to the game controller.

In the current Office Action, the claim feature of “locking the status of the gaming machine printer in the nonvolatile memory when the gaming machine printer determines that the communication link is interrupted” is not addressed. Instead, the Office Action misstates the claim feature as being “storing by the network machine printer the status of the network machine printer determines that the communication link is interrupted.” That is, the Office Action did not consider the portions of the feature that indicate that the status of

the gaming machine printer is locked into a nonvolatile memory when the gaming machine printer determines that the communication link is interrupted. In the cited references, there is no indication that the printers of Reilly use a nonvolatile memory to store the printer queue. In addition, there is no indication in Reilly that the status is locked into any memory, much less a nonvolatile memory. Instead, the printer queue data may be freely modified by the printer while the printer is disconnected from a particular host.

Stockdale is not seen to remedy the deficiencies of Reilly. In particular, Stockdale discloses that state history of peripherals connected to the peripheral controller 234 may be communicated to the master gaming controller 200 when the game is powered-up. However, Stockdale fails to disclose or suggest transmitting the status of the gaming machine printer to the game controller when the communication link is reestablished by the gaming machine printer.

In addition, in the Office Action, it is contended that Stockdale discloses “locking in a memory status information of a gaming machine printer when it is determined that a communication link with a peripheral is interrupted.” The actual claim language reads “locking by the gaming machine printer the status of the gaming machine printer in the nonvolatile memory when the gaming machine printer determines that the communication link is interrupted.” In the cited portions of Stockdale, there is only an indication that the master gaming controller relies on the USB communications protocol to detect when a peripheral device is disconnected. There is no indication in Stockdale that a peripheral, such as a gaming machine printer, can detect when the self-same gaming machine printer is disconnected from a game controller and then can then perform an operation of locking by the gaming machine printer the status of the gaming machine printer in the nonvolatile memory

when the gaming machine printer determines that the communication link is interrupted as featured in the claims.

Furthermore, Stockdale discloses that a peripheral is incapable of storing status information as contended in the Office Action. According to Stockdale, the peripheral controller and not the peripheral itself contains nonvolatile memory for storing state history information of the peripheral. (See Stockdale, column 3, lines 43 to 46). The peripheral controller or the master game controller may log a “critical error” when the peripheral controller or the master game controller loses communication with the peripheral. (See Stockdale, column 16, lines 39 to 48). However, there is no discussion in Stockdale as to what the peripheral does in such an event. Specifically, there is no disclosure or suggestion in Stockdale of determining by the gaming machine printer the status of a communication link to a game controller via the communication port, locking by the gaming machine printer the status of the gaming machine printer in the nonvolatile memory when the gaming machine printer determines that the communications link is interrupted, and transmitting by the gaming machine printer the status of the gaming machine printer to the game controller when the communication link is reestablished by the gaming machine printer.

Therefore, independent Claims 25 and 28 are believed to be in condition for allowance, and such action is respectfully requested.

The other claims in the application are each dependent from the independent claims discussed above and are therefore believed to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

No other matters being raised, the entire application is believed to be in condition for allowance, and such action is courteously solicited.